

# Microlens arrays

The international Genetically Engineered Machine (iGEM) competition is the largest worldwide synthetic biology competition for collegiate students. It aims to combine and create novel biological (genetic) parts, which can be incorporated in an organism, equipping it with new functions.

We, as this year's team, are going to compete against three hundred other prestigious teams worldwide with our bio-optics project. This project can be divided in two parts: the production of biological laser light and the production of biological microlenses. One promising finding is the use of micro lens arrays (MLAs). It is already proven that the use of a MLA on a solar cell as an encapsulation layer results in a 10 to almost 20% increase of the efficiency.

Within the competition there is a separated price for the best business plan. Therefore, we are currently working on a business plan for the micro lenses. The business strategy is to introduce the biological MLAs in the solar cell production market first. In order to obtain information about future possible customers and/or partners, we have developed a survey. I kindly request you to please fill out the survey. This would help us a lot.

It will take less than 10 minutes to fill out the survey. Thank you for your time.

1. On a scale of 1 to 5, where 1 is not at all and 5 is high:

	1	2	3	4	5
How important is the price of the solar cells for you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How important is the quality of the solar cells (lifetime)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How important is the efficiency of the solar cells?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How important is the environment for you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Before this survey, did you already think about the environmental aspects of the solar panels itself? For example, did you look into which type of solar cell is the most environmental friendly?

3. What is the main reason you have purchased or you are considering to purchase solar panels?

Cost consideration

☐

The environmental aspects

☐

Self-sufficiency

☐

4. Do you think that, not taking the price into account, more environmentally friendly produced solar panels provide added value for you as consumer?

No

☐

Yes

☐

5. If the answer to the previous question was yes, would you be willing to pay a higher price for the more environmentally friendly solar panels?

No

☐

Yes

☐

6. If the price is comparable, would you choose the most environmental friendly solar panels?

No

☐

I do not care

☐

Yes. However, I do not want to spent too much time figuring out what the most environmental friendly type is

☐

Yes

☐

7. After this survey, would you look into the environmental aspects of the solar panels itself?

No

☐

Yes, but I do not want to spent too much time on it

☐

Yes

☐

8. Other comments and feedback: